



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

A NEW VARIABLE STAR.

On the night of September 26, 1906, in the course of my survey for new double stars, I examined the star B. D. $+51^{\circ}.3676$ and found that it was fainter than 9.0 magnitude, though marked 7.8 in the B. D. As an examination of the published lists of variable stars failed to show this star, I called Mr. MADDRILL's attention to it, and he has secured the observations given below, which prove beyond doubt that it is a variable, almost certainly of long period. The star is given in two star catalogues, Radcliffe I (epoch 1846.9) and Harvard A. G. (epoch 1873.6), and is there rated as 7.0 and 7.5 magnitude respectively.

The star's position is:—

$23^{\text{h}}\ 32^{\text{m}}\ 38^{\text{s}}.0; +51^{\circ}\ 27'.8$ (1855.0)
 $23\ 34\ 11.55; +51\ 42\ 31''.3$ (1900.0)

R. G. AITKEN.

PHOTOMETER OBSERVATIONS OF B. D. $+51^{\circ}.3676$.

Photometric observations of the star have been secured on several nights, at the suggestion of Dr. AITKEN. On each night the suspected variable star was compared with two stars, *a* and *b*, with the Rumford¹ wedge photometer.

To eliminate or check changes in the artificial star or in the transparency of the sky, the order of observation was in each case: *v a v b v b v a v*, three or four settings of the wedge—with one or two more, if discordant—being made on each star in turn. The same combination of shade-glasses was used each night. The Moon happened to be above the horizon during each observation.

The details of observation will be given later in a Lick Observatory *Bulletin*. It seems sufficient for the present to state that the conditions were not good in general but that concordant results were obtained, as shown in the following self-explanatory tables:—

COMPARISON-STARS.

Star.	B. D.	Adopted Mag.	Authority.
<i>a</i>	$+51^{\circ}.3655$	7 ^m .02	Harvard Photometric Durchmusterung.
<i>b</i>	$+51\ .3670$	8 .88	Mean of my nine measures.

* See these *Publications*, No. 103; or the more extended description in Lick Observatory *Bulletin* No. 83.